

## Food and Drug Administration, HHS

## § 556.739

(a) Zero in the uncooked edible tissues of swine and in milk.

(b) 0.1 part per million (negligible residue) in uncooked edible tissues of cattle.

### § 556.660 Sulfamerazine.

A tolerance of zero is established for residues of sulfamerazine (N<sup>1</sup>-[4-methyl-2-pyrimidinyl]sulfanilamide) in the uncooked edible tissues of trout.

### § 556.670 Sulfamethazine.

A tolerance of 0.1 part per million is established for negligible residues of sulfamethazine in the uncooked edible tissues of chickens, turkeys, cattle, and swine.

[47 FR 25323, June 11, 1982]

### § 556.680 Sulfanitran.

A tolerance of zero is established for residues of sulfanitran (acetyl(*p*-nitrophenyl) sulfanilamide) and its metabolites in the uncooked edible tissues of chickens.

### § 556.685 Sulfaquinoxaline.

A tolerance of 0.1 part per million is established for negligible residues of sulfaquinoxaline in the uncooked edible tissues of chickens, turkeys, calves, and cattle.

[61 FR 24443, May 15, 1996]

### § 556.690 Sulfathiazole.

A tolerance of 0.1 part per million is established for negligible residues of sulfathiazole in the uncooked edible tissues of swine.

### § 556.700 Sulfomyxin.

A tolerance of zero is established for residues of sulfomyxin (N-sulfomethyl-polymyxin B sodium salt) in uncooked edible tissues from chickens and turkeys.

### § 556.710 Testosterone propionate.

No residues of testosterone, resulting from the use of testosterone propionate, are permitted in excess of the following increments above the concentrations of testosterone naturally present in untreated animals:

(a) In uncooked edible tissues of heifers:

(1) 0.64 part per billion in muscle.

(2) 2.6 parts per billion in fat.

(3) 1.9 parts per billion in kidney.

(4) 1.3 parts per billion in liver.

(b) [Reserved]

[52 FR 27683, July 23, 1987]

### § 556.720 Tetracycline.

(a) *Acceptable daily intake (ADI)*. The ADI for total tetracycline residues (chlortetracycline, oxytetracycline, and tetracycline) is 25 micrograms per kilogram of body weight per day.

(b) *Tolerances*. Tolerances are established for the sum of tetracycline residues in tissues of calves, swine, sheep, chickens, and turkeys, of 2 parts per million (ppm) in muscle, 6 ppm in liver, and 12 ppm in fat and kidney.

[63 FR 57246, Oct. 27, 1998]

### § 556.730 Thiabendazole.

Tolerances are established at 0.1 part per million for negligible residues of thiabendazole in uncooked edible tissues of cattle, goats, sheep, pheasants, and swine, and at 0.05 part per million for negligible residues in milk.

[40 FR 13942, Mar. 27, 1975, as amended at 49 FR 29958, July 25, 1984]

### § 556.735 Tilmicosin.

(a) *Acceptable daily intake (ADI)*. The ADI for total residues of tilmicosin is 25 micrograms per kilogram of body weight per day.

(b) *Tolerances*—(1) *Cattle*. A tolerance is established for residues of parent tilmicosin (marker residue) in liver (target tissue) at 1.2 parts per million (ppm).

(2) *Swine*. A tolerance is established for residues of parent tilmicosin (marker residue) in liver (target tissue) at 7.5 ppm and in muscle at 0.1 ppm.

[64 FR 13679, Mar. 22, 1999]

### § 556.738 Tiamulin.

A tolerance of 0.6 part per million is established for 8-*alpha*-hydroxymutilin (marker compound) in liver (target tissue) of swine.

[62 FR 12086, Mar. 14, 1997]

### § 556.739 Trenbolone.

(a) *Acceptable daily intake (ADI)*. The ADI for total residues of trenbolone is

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0.4 microgram per kilogram of body weight per day.

(b) *Tolerances.* A tolerance for total trenbolone residues in uncooked edible tissues of cattle is not needed.

[64 FR 18574, Apr. 15, 1999]

## § 556.740 Tylosin.

Tolerances are established for residues of tylosin in edible products of animals as follows:

(a) In chickens and turkeys: 0.2 part per million (negligible residue) in uncooked fat, muscle, liver, and kidney.

(b) In cattle: 0.2 part per million (negligible residue) in uncooked fat, muscle, liver, and kidney.

(c) In swine: 0.2 part per million (negligible residue) in uncooked fat, muscle, liver, and kidney.

(d) In milk: 0.05 part per million (negligible residue).

(e) In eggs: 0.2 part per million (negligible residue).

## § 556.741 Tripelennamine.

A tolerance of 200 parts per billion (ppb) is established for residues of tripelennamine in uncooked edible tissues of cattle and 20 ppb in milk.

[62 FR 4164, Jan. 29, 1997]

## § 556.750 Virginiamycin.

(a) *Acceptable daily intake (ADI).* The ADI for total residues of virginiamycin is 250 micrograms per kilogram of body weight per day.

(b) *Tolerances—(1) Swine.* Tolerances are established for residues of virginiamycin in uncooked edible tissues of 0.4 part per million (ppm) in kidney, skin, and fat, 0.3 ppm in liver, and 0.1 ppm in muscle.

(2) *Broiler chickens and cattle.* A tolerance for residues of virginiamycin is not required.

[64 FR 48296, Sept. 3, 1999]

## § 556.760 Zeranol.

(a) *Acceptable daily intake (ADI).* The ADI for total residues of zeranol is 0.00125 milligrams per kilogram of body weight per day.

(b) *Tolerances—(1) Cattle.* Tolerances for residues of zeranol in edible tissues are not needed.

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(2) *Sheep.* No residues of zeranol may be found in the uncooked edible tissues of sheep as determined by the following method of analysis:

### I. METHOD OF ANALYSIS—ZERANOL

A gas chromatographic method for the determination of the drug in frozen beef tissues is described. Tissue is frozen and stored in a deep freezer until ready for examination. A weighed portion of wet tissue (with exception of fat) is homogenized and lyophilized to dry solid. The drug is recovered from dry tissue by an extraction with methanol in a Soxhlet extractor. The methanol extract is digested in the presence of hydrochloric acid to hydrolyze conjugates should any be present. Elimination of impurities is brought about by liquid partition transfer successively to chloroform to 1N sodium hydroxide, to carbon tetrachloride, to 1N sodium hydroxide, to ethyl ether, and, finally, to a dry residue. The residue is reacted with a silane mixture to create a volatile derivative which is quantitated by peak area measurements from a flame ionization detector. The drug can be detected at a level of 20 parts per billion with negligible interference from tissues or reagents.

### II. REAGENTS

A. Carbon tetrachloride, N.F., Fisher Scientific C-186, or equivalent.

B. Chloroform, N.F., Fisher Scientific C-296, or equivalent.

C. Chromatograph gases, flow rates adjusted to maximize sensitivity for specific chromatograph.

1. Carrier gas, conventional tank helium.

2. Flame makeup gas.

a. Oxygen, conventional tank oxygen.

b. Hydrogen, Linde high purity, or equivalent.

D. Column packing, 3 percent GE SE-52 (Applied Science Laboratories) on P.E. Celite 60-80 mesh (Johns Manville Product No. 154-0048), or equivalent.

E. Ether, anhydrous, Fisher Scientific E-138, or equivalent.

F. Hexamethyldisilazane, Dow-Corning, Peninsular, or equivalent.

G. Hydrochloric acid, analytical reagent grade.

H. Methanol, certified A.C.S., spectranalyzed, Fisher Scientific A-408, or equivalent.

I. Phosphoric acid, analytical reagent grade.

J. Pyridine, anhydrous, A.C.S. reagent grade.

K. Silating reagent mixture: Pipet 8 milliliters each of pyridine and hexamethyldisilazane and 4 milliliters of trimethylchlorosilane into a clean glass vial with a polyethylene cap and mix thoroughly.